



UNITED STATES PATENT AND TRADEMARK OFFICE

AC
UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/825,848	04/05/2001	Osamu Yokoyama	109195	3068
25944	7590	03/26/2004		
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			EXAMINER COLON, GERMAN	
			ART UNIT 2879	PAPER NUMBER

DATE MAILED: 03/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/825,848	YOKOYAMA ET AL.	
	Examiner	Art Unit	
	German Colón	2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 05 October 2001.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-12 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>083101</u> . | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

Response to Preliminary Amendment

1. The Pre-Amendment, filed on October 05, 2001, has been entered and acknowledged by the Examiner.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 8 recites the limitation "the second electrode" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-6 and 9-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Liedenbaum et al. (US 6,054,725).

Regarding claim 1, Liedenbaum discloses an organic EL device having a layered structure, comprising:

a substrate **8**;

electrode layers **3B,6** formed above the substrate;

an organic light emitting layer **5** provided between the electrode layers formed above the substrate, the electrode layers including a first electrode layer **3B** that has a transparent property, the first electrode layer being formed in a pattern corresponding to a light emitting pattern; and

a dummy pattern **3A** placed in the same plane as the first electrode layer, such that the dummy pattern is electrically isolate from the first electrode layer (see Figs. 1 and 2).

Regarding claim 2, Liedenbaum discloses an organic EL device having a layered structure, comprising:

a substrate **8**;

electrode layers **3B,6** formed above the substrate;

an organic light emitting layer **5** provided between the electrode layers formed above the substrate, each electrode layer being formed in such a pattern that part of the electrode layers overlap each other, the overlapping part of the electrode layers including a light emitting section made of an organic EL element, the electrode layers including a first electrode layer **3B** having a transparent property; and

a dummy pattern **3A** placed in the same plane as the first electrode layer, such that the dummy pattern is electrically isolate from the first electrode layer (see Figs. 1 and 2).

Regarding claims 3 and 4, Liedenbaum discloses the dummy pattern **3A** being formed of the same material as the first electrode layer.

Referring to claim 5, Liedenbaum discloses the dummy pattern being formed within the light emitting area of the organic light emitting layer.

Referring to claim 6, Liedenbaum discloses the substrate having a transparent property, and the first electrode layer being an electrode formed on a substrate side face of the organic light emitting layer.

Referring to claim 9, Liedenbaum discloses a display panel having a layered structure, comprising:

a substrate **8**;

electrode layers **3B,6** formed on the substrate;

a display element layer **5** provided between the electrode layers formed above the substrate, the electrode layers including a first electrode layer **3B** having a transparent property, the first electrode layer being formed in a pattern corresponding to a light emitting pattern, the pattern being displayed by applying a voltage between the electrode layers; and

a dummy pattern **3A**, within a display area, which is made of the same material as the first electrode layer and placed in the same plane as the first electrode layer so that the dummy pattern is electrically isolated from the first electrode layer (see Figs. 1 and 2).

In regards to claim 10, Liedenbaum discloses a display panel having a layered structure, comprising:

a substrate **8**;

electrode layers **3B,6** formed on the substrate;

a display element layer **5** provided between the electrode layers formed above the substrate, each electrode layer being formed in a pattern where part of the electrode layers overlap each other, the overlapping part of the electrode layers including a display element section, a pattern being display by applying a voltage between the electrode layers, the electrode layers including a first electrode layer **3B** having a transparent property; and

a dummy pattern **3A**, within the display area, which is made of the same material as the first electrode layer and placed in the same plane as the first electrode layer so that the dummy pattern is electrically isolated from the first electrode layer (see Figs. 1 and 2).

In regards to claim 11, Liedenbaum discloses the substrate having a transparent property, the first electrode layer being an electrode layer formed on a substrate-side face of a display element layer.

6. Claims 1, 2, 5 and 6 are rejected under 35 U.S.C. 102(e) as being anticipated by Ogawa (US 6,686,693).

Regarding claim 1, Ogawa discloses an organic EL device having a layered structure, comprising:

a substrate **2**;

electrode layers **3,7** formed above the substrate;

an organic light emitting layer **6** provided between the electrode layers formed above the substrate, the electrode layers including a first electrode layer **3** that has a transparent property, the first electrode layer being formed in a pattern corresponding to a light emitting pattern; and

a dummy pattern **4Aa** placed in the same plane as the first electrode layer, such that the dummy pattern is electrically isolate from the first electrode layer (see Figs. 1 and 2).

Regarding claim 2, Ogawa discloses an organic EL device having a layered structure, comprising:

a substrate **2**;

electrode layers **3,7** formed above the substrate;

an organic light emitting layer **6** provided between the electrode layers formed above the substrate, each electrode layer being formed in such a pattern that part of the electrode layers overlap each other, the overlapping part of the electrode layers including a light emitting section made of an organic EL element, the electrode layers including a first electrode layer **3** having a transparent property; and

a dummy pattern **4Aa** placed in the same plane as the first electrode layer, such that the dummy pattern is electrically isolate from the first electrode layer (see Figs. 4, 6A and 6B).

Referring to claim 5, Ogawa discloses the dummy pattern being formed within the light emitting area of the organic light emitting layer.

Referring to claim 6, Ogawa discloses the substrate having a transparent property, and the first electrode layer being an electrode formed on a substrate side face of the organic light emitting layer.

7. Claims 2, 4 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Miyauchi et al. (JP 2000-012238).

In regards to claim 2, Miyauchi discloses an organic EL device having a layered structure, comprising:

a substrate 3;

electrode layers 4,7 formed above the substrate;

an organic light emitting layer 5 provided between the electrode layers formed above the substrate, each electrode layer being formed in such a pattern that part of the electrode layers overlap each other, the overlapping part of the electrode layers including a light emitting section made of an organic EL element, the electrode layers including a first electrode layer 4 having a transparent property; and

a dummy pattern 8 placed in the same plane as a second electrode layer, such that the dummy pattern is electrically isolate from the second electrode layer (see Figs. 1 and 5).

In regards to claim 4, Miyauchi discloses the dummy pattern placed in the same plane as the second electrode layer being formed with the same material as the second electrode layer.

In regards to claim 10, Miyauchi discloses a display panel having a layered structure, comprising:

a substrate 3;

electrode layers 4,7 formed on the substrate;

a display element layer 5 provided between the electrode layers formed above the substrate, each electrode layer being formed in a pattern where part of the electrode layers overlap each other, the overlapping part of the electrode layers including a display element section, a pattern being display by applying a voltage between the electrode layers, the electrode layers including a first electrode layer 4 having a transparent property; and

a dummy pattern **8**, within the display area, which is made of the same material as the second electrode layer and placed in the same plane as a second electrode layer, such that the dummy pattern is electrically isolate from the second electrode layer (see Figs. 1 and 5).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-6 and 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujii et al. (US 5,693,428) in view of Arai et al. (JP 06-052990).

Regarding claim 1, Fujii discloses an organic EL device having a layered structure, comprising:

a substrate **1**;

electrode layers **2,6** formed above the substrate;

an organic light emitting layer **4a** provided between the electrode layers formed above the substrate, the electrode layers including a first electrode layer **2** that has a transparent property, the first electrode layer being formed in a pattern corresponding to a light emitting pattern. Fujii is silent regarding the limitation of “a dummy pattern place in the same plane as the first electrode layer, said dummy pattern being electrically isolated from the first electrode layer”.

However, in the same field of endeavor, Arai discloses an EL element comprising first and second electrode layers, and having a dummy pattern placed in the same plane as the first electrode layer and made of the same material of the first electrode layer, and a dummy pattern place in the same plane as the second electrode layer and made of the same material of the second electrode layer, in order to improve the quality and contrast of an image by making uniform the brightness of the whole area of the display surface, shielding the electrode layers and wiring electrodes pattern configurations from the reflection of incident light on the screen, regardless of an emitting or non-emitting state (see paragraph [0006] , [0007] and [0011]). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a dummy pattern to the EL device of Fujii, with the purpose of improving the quality and contrast of an image by making uniform the brightness of the whole area of the display surface, shielding the electrode layers and wiring electrodes pattern configurations from the reflection of incident light on the screen, regardless of an emitting or non-emitting state.

Regarding claim 2, Fujii-Arai discloses an organic EL device having a layered structure, comprising:

a substrate 1;
electrode layers 2,6 formed above the substrate;
an organic light emitting layer 4a provided between the electrode layers formed above the substrate, each electrode layer being formed in such a pattern that part of the electrode layers overlap each other, the overlapping part of the electrode layers including a light emitting section made of an organic EL element, the electrode layers including a first electrode layer 2 having a transparent property; and

Art Unit: 2879

Referring to claim 11, Fujii-Arai discloses the substrate having a transparent property and the first electrode layer being an electrode layer formed on a substrate-side face of a display element layer.

10. Claims 7 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujii-Arai as applied to claims 6 and 11 above, and further in view of Codama (US 6,091,196).

Regarding claim 7, Fujii-Arai discloses the EL device having a glass substrate and the first electrodes being made of ITO, but is silent regarding the limitation of “the substrate being made of soda glass”.

However, in the same field of endeavor, Codama discloses an OLED having a glass substrate and teaches soda glass to be suitable in the manufacture of EL devices because of its low cost (see Col. 9, line 37). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a soda glass as the substrate in order to reduce production costs. Further, it has been held to be within the general skill of an artisan to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice.

Regarding claim 12, claim 12 is rejected over the reasons stated in the rejection of claim 7.

Prior Art of Record

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Harrison (US 5,748,568) discloses a display having a plurality of patterned conductive regions.

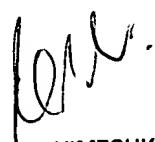
Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to German Colón whose telephone number is 571-272-2451. The examiner can normally be reached on Monday thru Thursday, from 8:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on 571-272-2457. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


gc


NIMESHKUMAR D. PATEL
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800